

MARK A. R. KLEIMAN
ANGELA HAWKEN

Fixing the Parole System

A system relying on swiftness and certainty of punishment rather than on severity would result in less crime and fewer people in prison.

About 600,000 felons will be released from prison this year in the United States and begin some form of official supervision, usually parole. But the nation's system for managing them in the community is inept. Turning this situation around requires paying attention to one simple idea: When it comes to changing behavior, swiftness and certainty of punishment matter more than severity. Under a reformed system, parolees would be closely monitored for compliance with parole conditions, and any detected violation would be met with immediate and predictable consequences.

There is now experimental evidence from probation that this idea can be put into practice, with dramatic effects. But organizing interlocking public agencies to be able to deliver swift and certain sanctions may pose a larger challenge than getting offenders to comply once such sanctions are in place.

Crime rates in the United States have fallen by nearly half since their highs in the early 1990s but remain substantially elevated from the levels of the 1950s. In homicide, the United States retains the undesirable distinction of having the highest rates in the developed world. Every year about eight times as many U.S. residents are deliberately killed by one another as were killed by foreign terrorists on September 11, 2001.

Crime, and especially the most serious kinds of violent crime, remains heavily concentrated among low-status groups. Criminals and victims alike are far more likely than average to be poor, poorly educated, and black. The disparities are greatest in the case of gang violence, which accounts for a rising share of the total. Even after the recent crime decline, the fear of crime continues to drive the location decisions of households and businesses, contributing to the concentrations of poverty that, in turn, help maintain high local crime rates.

Although crime has declined substantially, the rate of incarceration has continued to grow at approximately 3% per year. The United States now has 2.3 million people—nearly 1% of the adult population—behind bars, several times the rate of any other nation in the Organization for Economic Cooperation and Development. The failure of parole and other forms of post-incarceration supervision contributes to crime and increases the size of the prison population. More effective parole could enable the nation to have less crime and less incarceration.

The number of felons released on parole will continue to grow, because ever more convicts are being sent to prison and because crowded prisons are being forced to release some of those convicts early in order to meet budget lim-

Neri Oxman

Massachusetts Institute of Technology

Oxman, an architect, established *Materialecology* to undertake interdisciplinary research in the intersection between architecture, engineering, computation, and ecology. Architects are currently studying the possibility of creating dynamic buildings that adapt to changing environmental conditions and levels of occupancy. The surface of *Cartesian Wax* is thickened locally where it is structurally required to support itself, and modulates its transparency according to the light conditions, heat flux, and structural support needed. "The work is inspired by Descartes's *Cartesian Wax* thesis," explains Oxman, "which relates to the construction of self knowledge and the way it is informed by and reports on an individual's experience of the physical world."

Cartesian Wax from the *Materialecology* project. Rhinoceros and Generative Components software; ultra-low viscosity urethane rubber, semirigid polyurethane casting resin composite, and machinable wax, 2007.



its and population caps. The condition of those ex-prisoners after return to civilian life will be, on average, terrible. Many of them will be homeless (and will be ineligible for shelter space until they have spent at least one night on the street). Most of them will have untreated physical illnesses, mental diseases, addiction disorders, or a combination of these. Two-thirds of them will be back behind bars within three years.

In addition to their own suffering, released prisoners often also cause suffering to others, most notably the victims of their future crimes. Public agencies have tried a variety of service-delivery approaches to improve their condition and behavior, none with especially striking success. Among other problems, felony criminal histories render many parolees hard to employ and ineligible for a range of social service programs.

Less attention has been paid to the role of supervision (as opposed to services) in improving the lives of parolees and the communities to which they return. Most current systems of supervision perform poorly as measured by the condition and behavior of those subject to them.

Not only does parole markedly fail to control the behavior of its clients, it also contributes heavily to the prison-crowding problem by sending so many of them back. And the high recidivism rate among parolees, while casting doubt on the capacity of incarceration to achieve either deterrence or rehabilitation, also complicates the task of reducing the number of people behind bars: It is harder to make the case that large numbers of prisoners don't need to be there when they have such a hard time staying out after they are released.

Deterrence dynamics

If offenders were perfectly rational in economic terms—if they acted so as to maximize the expected utility of the results of their actions, appropriately adjusted for risk and delay—then the nation's current criminal justice system would provide better-than-adequate deterrence for most street crimes. Although the vast majority of offenses result in no punishment, a tiny proportion of them, chosen almost at random by the accidents of the law enforcement process, lead to years of incarceration. The expected present value of the punishment for street drug dealing or residential burglary, using any reasonable set of valuations and discount rates, far exceeds the quite modest financial rewards: A residential burglar, on average, receives less than \$10 in illicit gains per expected day spent behind bars. In some markets, retail crack dealers earn less than the minimum wage.

Accordingly, the criminally active population overrepresents not only those with poor noncriminal opportunities,

but also the strongly present-oriented, reckless, and impulsive. This latter group has exaggerated versions of the normal human tendencies (of the sort studied by psychologists and behavioral economists) to give undue weight to the immediate future over the even slightly longer term, and to underweight small risks of large disasters by comparison with high probabilities of small gains. Thus, efforts to control crime by increasing the severity of punishment will quickly hit the point of diminishing returns.

The idea that swiftness and certainty are more important determinants of deterrent effectiveness is at least as old as the founding document of criminology, Cesare Beccaria's 18th-century *On Crimes and Punishments*. But putting that insight into practice requires more capacity for detecting crime and faster-acting justice mechanisms than the nation currently has or is likely to acquire. The tension between legal due process and the demand for swift justice is not easily resolved, and the more severe the punishment, the slower the requisite process is likely to be, as the glacial pace of death-penalty litigation illustrates.

Unfortunately, the community-corrections system—parole or supervised release for those let out of prison before the expiration of their terms, and probation for those not incarcerated at all or incarcerated only briefly in a jail as opposed to a prison—reproduces the flaws of the broader criminal justice system. Probationers and parolees are subject to a variety of rules specific to them, in addition to their obligation to obey the laws that apply to all. Yet with caseloads in community-corrections agencies ranging from scores to hundreds of offenders per officer, the probability of detection of any given violation (whether a “technical” violation, such as missing an appointment, or a new crime) is tiny. The penalties for violation can be severe: months or even years behind bars. But even a detected violation is unlikely to lead to a sanction, and even if it does, the process typically takes weeks, if not months. And even in the extreme case in which a probationer simply walks away (“absconds”) from supervision—in a typical big-city probation office, 10% or more of the nominal caseload consists of absconders—it's still true that nothing is likely to happen. If the absconder is reported to the court, a bench warrant for his arrest may be issued, but most law enforcement agencies give a low priority to the service of bench warrants, so it is unlikely that anyone will actually pursue the absconder. Instead, the warrant is likely to remain dormant until the probationer is arrested for something else.

The contrast between the low-violation and the high-violation equilibriums can be illustrated by imagining two different classrooms. If a teacher faces a class of mostly

well-behaved students, when Johnny starts throwing spitballs, the teacher can call him to order, making him less likely to misbehave again and reminding other students not to imitate him. But now consider the same teacher facing a classroom where Johnny is throwing spitballs, Judy is passing notes, Jane is doodling in her textbook, and Jim and Jerry have started a fistfight. Overwhelmed by the sheer volume of misconduct, the teacher likely will deal first with the fistfight, ignoring the other violations of the rules. But this action conveys to those miscreants and others that misconduct does not lead to sanctions. That disorderly classroom, which has a strong resemblance to the current community-corrections system, will have not only more violations but more punishments than the orderly classroom.

Analytically, the problem of rule enforcement is described by the “tipping” model first developed by economist and Nobel laureate Thomas Schelling. The effectiveness of any deterrent threat in enforcing a rule depends in part on how likely it is that someone who breaks that rule will actually be punished. The probability of punishment, in turn, depends on the availability of enforcement resources and the frequency of violation. Thus, as in the classic tipping scenario, both high violation rates and low ones tend to be self-sustaining, because high violation rates generate small risks of punishment, whereas low violation rates generate large risks.

That helps explain why violations tend to be concentrated both geographically (in hot spots) and temporally (in crime waves), because crime-control resources are always limited and do not automatically rise in step with the violation rate. For a given sanctioning capacity, a low-violation community can deliver a high dose of sanction per violation. If for some reason the rate of violation increased, the sanction rate per violation would fall. The result is a low punishment-per-violation ratio, which entices offenders to commit further violations as they face lower effective risks of punishment. The induced violations lead to an even lower punishment-per-offense ratio, and the cycle continues.

Thus, high violation rates may become self-sustaining as the large number of violations outstrips the capacity of the enforcement system to deliver reliably on the threat of punishment, and the reduced risk of punishment encourages still higher rates of violation. The result can be a “social trap” in which violation rates in some times and places are high and the punishment risk per violation is low. That leaves enforcement agencies with the unpleasant choice between further escalating the level of punishment in an attempt to restore a punishment-per-offense level that would be an effective deterrent, or instead cutting back on punishment and risking a further escalation of violation rates.

In principle, there is an escape from this trap: Even a temporary increase in sanctions capacity, if it brings the sanctions risk per offense above the tipping point of the system long enough to produce a behavioral response among potential violators, has the potential to move the system from high violation, low punishment risk, to low violation, high punishment risk. Once that situation is reached, even the original pre-enhancement sanctions capacity may be adequate to maintain it.

But that leaves the problem of where the temporary increment to sanctions capacity is to come from. One answer is concentration: A level of sanctions capacity that produces nothing but futile punishment if scattered broadly may be sufficient to get some part of the problem—a group of offenders, a specific offense type, or a geographic region—past its tipping point. If that can be done, reduced violation rates in the area of concentration will then free up sanctions capacity to be concentrated elsewhere. Thus, a situation that seems intractable if addressed all at once may yield to piece-by-piece tactics.

Using scarce punishment capacity more economically by stressing certainty over severity, increasing its efficacy by shortening the time between violation and response, and directly communicating the deterrent threat (and its concentration) to potential violators can all tend to reduce the critical value of sanctions capacity and minimize the cost of moving from high violation, low punishment risk, to low violation, high punishment risk.

If the nation can learn to put these ideas into practice, it may be possible to drastically change the terms of the trade-off between crime and punishment. This is among the conclusions of a National Research Council workshop report *Parole, Desistance from Crime, and Community Integration*, released in late 2007. The report also determined that the community-corrections system offers a proving ground for projects aimed at “getting deterrence right.”

Reform in Hawaii

Five years ago, the probation system in Honolulu was typical. Hawaiian probation officers were better trained than average, but like probation officers everywhere they found themselves overwhelmed by the sheer volume of rule breaking by probationers. Of a randomly drawn group of 100 probationers ordered to meet with their probation officers and submit to drug testing, about 10 would fail to appear and another 20 would test “dirty” for one or more illicit drugs, even though the appointments were announced far enough in advance that probationers could escape detection merely by abstaining from drug use. Probationers ordered

to enter and remain in outpatient drug treatment programs complied with those orders only sporadically.

Such drug treatment problems are common nationwide. A typical drug-diversion program, in which offenders are supposed to accept treatment in order to avoid incarceration, has rates of treatment entry of less than 70% among those ordered into treatment and rates of completion of about 30%. Diversion clients who fail to show up for treatment or who drop out before completing the prescribed course are very unlikely to face any sanction, even if the treatment provider reports nonattendance to the probation officer and the probationer in turn reports that to the sentencing court. Here again, high violation rates and low sanctions rates, conditional on violation, are mutually reinforcing.

The drug that is most abused by Hawaii’s felony probationers is methamphetamine, with alcohol (often in combination) second; the opiates are rarely encountered. Methamphetamine abuse, although treatable in the sense that all drug abuse disorders are treatable, tends to have low treatment-retention rates and poor outcomes, especially compared with the abuse of opiates, where substitution therapies reliably retain 75% or more of the clients and reliably reduce the crime rates and improve the personal condition of those who continue to make use of them.

There were not enough hours in a Honolulu probation officer’s workday to prepare the paperwork to start the sanctions process for more than a tiny fraction of missed and dirty drug tests and failures to comply with treatment orders. The usual response to a missed appointment or a positive drug test was a warning. Only after a long series of violations would the probation officer admit defeat and spend the time to write up a motion to revoke probation, potentially (but not, in practice, usually) leading to the imposition of a prison term by the sentencing judge.

The threat of a possible sanction sometime in the indefinite future had little deterrent value. Levels of noncompliance tended to rise sharply over the course of any individual’s probation term, as clients learned that they could get away with drug use almost all of the time. Still, a substantial number eventually accumulated sufficiently long records of noncompliance to lead to revocation.

One judge, Steven Alm, recognized the problems and decided to try something different, implementing a pilot program called Hawaii’s Opportunity Probation with Enforcement (HOPE). After long negotiations with the probation department, police, and jail administrators, Alm selected a few dozen probationers whose records of noncompliance put them at imminent risk of having their probations revoked. They were called in for a new court procedure, dubbed by



Julius Popp

Hochschule für Grafik und Buchkunst
Leipzig

Popp uses drips of water to create a waterfall of words and images. A horizontal module with computer-controlled valves hung from the ceiling releases droplets at precise times to form predetermined shapes. The result is a word or message that seems to magically rain down from the ceiling and then disappear upon impact with the floor. Popp describes *bit.fall* as “a metaphor for the incessant flood of information we are exposed to.”

bit.fall prototype. Water, pump, magnetic valves, and electronic circuits, 2001-06. Prototype by Spherical Robots, Germany (2006).

Images by François Doury





Oded Ezer

Tyosperma, the second experimental project in Oded Ezer's Biotypography series, are cloned sperm with typographic information implanted into their DNA. These fantastical creatures literally embody the dream of design and science coming together. Ezer, a typographer trained at the Bezalel Academy in Jerusalem, appears on his Web site wearing a white lab coat and contemplating a vial, surrounded by tools not found in a typical design office. As he explains it, "The term Biotypography refers to any application that uses biological systems, living organisms, or derivatives thereof to create or modify typographical phenomena. The main purpose of the *Tyosperma* project was to create some sort of new transgenic creatures, half (human) sperm, half letter."

Tyosperma Concept. Macromedia FreeHand and Rhino software, 2007.

Image by Amir Lipsicas

Alm a "warning hearing," at which they were formally put on notice that each and every subsequent missed appointment or positive drug test would lead to an immediate jail stay ranging from two days to a few weeks.

To make it possible to carry out that threat, the probation department developed a fill-in-the-blanks violation-reporting form. Because probation was being "modified" instead of revoked and because the focus was a single, easily verified, recent violation, it was possible to drastically curtail the hearing process; a probationer who gave a dirty urine specimen in the morning would find himself in jail that evening. Subsequent violations led to longer jail stays and eventually to a choice between long-term residential treatment and prison.

To induce probationers to appear for testing even when they expected to be found to have used drugs, the program provided for more severe sanctions for nonappearance than for testing dirty. To make that threat effective, Alm arranged with federal and local authorities to have officers available to promptly arrest those who failed to appear. Only rarely have probationers absconded, so the demand placed on the fugitive-tracking system has been modest.

The warning hearings have proven strikingly effective. Of probationers warned (all chronic noncompliers), fewer than half were referred for an actual sanction, and most of those referred once and briefly jailed were never referred again. This happened despite the fact that the drug-testing regime for probationers subject to the new program was drastically tightened. Instead of infrequent testing by advance appointment, HOPE probationers called a hotline every weekday to learn whether they were required to come in for testing that day. Initially, they were tested six times a month, with decreasing frequency offered as a reward for obeying the rules.

At first, only probationers under Judge Alm's supervision were eligible for HOPE. That made it possible to assemble a comparison group of equally noncompliant probationers in other courtrooms—not exactly a true random selection, but a quite robust natural experiment. Compared with the three months before being put in the program, HOPE probationers reduced no-show and positive test result rates by more than 90%, and their behavior improved over time. In contrast, violation rates for the non-HOPE sample grew steadily worse over time, with 37% eventually having their probation revoked, compared with fewer than 5% of the HOPE group.

The HOPE pilot program has now been expanded to more than 1,000 probationers, about one-eighth of all felony probationers on Oahu, and to the calendars of all 10 felony judges. So far, the results of the expanded program match

the results of the pilot. A controlled trial with true random assignment between HOPE and business-as-usual probationers is currently under way. Evidence to date suggests that reductions in criminal-justice expenditures due to improved compliance pay several times over for the HOPE program's rather modest costs (about \$1,000 per probationer per year, most of that for drug treatment), with reductions in crime and improvements in probationers' welfare and conduct. The shrinkage of illicit drug markets due to the removal of active customers is a bonus benefit.

There also appear to be ways to make programs such as HOPE work even better. In one important respect, HOPE does not comply with the principles of behavioral change discovered by psychologists: Its focus is entirely on punishment, whereas the literature makes it clear that reward often can be a more potent force in shaping conduct. For example, researchers led by Stephen T. Higgins of the University of Vermont have shown in pilot programs involving cocaine and methamphetamine users that providing small financial rewards for "clean" urine tests can greatly increase compliance among individuals who want to quit and have sought help in doing so. Whether the same would be true for probationers is not clear. Moreover, positive incentives may be hard to integrate into community corrections, if only for political reasons; the citizen outrage at a proposal to pay criminals to stop committing crimes is easy to imagine, even if it could be shown that doing so is a cost-effective means of crime control. One possible way to deal with such political hurdles might be to cast rewards as remissions of previously assessed fines.

Still, the question of whether drug-involved probationers can and will reduce their drug use in the face of predictable sanctions has now been answered. The remaining open question is whether community-corrections agencies outside Hawaii can organize themselves and secure the necessary cooperation from the courts, police, jails, and drug treatment providers to actually make and deliver on that threat.

The California experiment

Although felony probationers are rarely Rotarians, parolees on average behave worse and have bigger problems. They tend to be older, with longer spells of drug abuse and longer and more serious criminal histories, and have much higher rates of rearrest. Even before their most recent prison stay, they are more likely than probationers to have been jobless and homeless. Their high rates of return to incarceration also make them expensive.

Consider California, which now spends an average of \$43,000 per year for each of its prisoners and also has the

highest rate of prison overcrowding in the country. The total number of inmates in the state's institutions exceeds 200% of design capacity, and such overcrowding poses health and safety risks to inmates and prison staff. Because of the conditions in the state's prisons, Gov. Arnold Schwarzenegger has proclaimed a state of emergency, and the federal courts are considering imposing a cap on the state's prison population on the grounds that the degree of crowding converts imprisonment into unconstitutional "cruel and unusual punishment."

The governor also has declared a fiscal state of emergency, which will force a trimming of the state's corrections budget. Parolees returning to the state's prisons are significant contributors to overcrowding problems and overall system costs. California parolees have the highest rate of return to prison of any state, with more than a third returning for drug crimes. With the poor performance of the status quo, the state's policymakers will have no choice but to look for new approaches.

Enter COPE, the California parole version of Hawaii's HOPE program. Negotiations are under way to test a supervision model for California parolees that would mirror the key elements of HOPE. The program would start small, with a limited number of parolees and probationers in a limited number of counties (a refreshingly prudent approach for a state with a history of rolling out untested programs en masse). This approach will enable COPE to be tested and tailored to the California system and tweaked to meet the needs of specific parolee populations. If outcome improvements in California are even a fraction of those observed in Hawaii, Californians can expect to see substantial savings in corrections costs and crime.

The plan in California calls for a three-armed randomized controlled trial, with one group getting business-as-usual treatment, one getting an aggressively therapeutic approach, and the third getting COPE. If the pilot study shows improved parolee outcomes with significant reductions in recidivism, the combination of that finding with what are expected to be strong evaluation results from Hawaii may create administrative and political conditions in which the innovation can spread, although it will always require appropriate adaptation to local conditions and procedures. A small federal grant program to fund HOPE-like experiments has already made it into law.

Extending the HOPE model

Illicit drug use is an important form of behavior to control and an easy one to monitor. That makes it a natural focus of HOPE-style programs. But nothing about the idea of

close monitoring and swift, predictable, and measured sanctions is specific to drug use. HOPE also has worked well with domestic violence offenders, where the behaviors being monitored are attendance at treatment sessions and compliance with restraining orders, and with sex offenders, where the issues are attendance at treatment sessions and observance of precautionary rules such as staying away from playgrounds and schoolyards.

Any behavior that relates closely to a probationer's risk of reoffending or chances of establishing a law-abiding lifestyle and that can be monitored with reasonable accuracy at acceptable cost is a candidate for incorporation into a HOPE-style community-corrections regime. For example, insofar as it becomes technically feasible to monitor a probationer's alcohol use (perhaps with a skin patch that detects alcohol in perspiration) or location (with cell-phone or global positioning system technology, or a combination of the two), then a HOPE-style program could require abstinence from alcohol and observance of time-and-place rules (such as a curfew, being at work during work hours, avoiding drug-dealing areas, or obeying "stay-away" orders).

The more parole and probation systems develop the capacity to punish law breaking and prevent reoffending without physically confining offenders, the more they will become true alternatives to incarceration and the better will be the terms of the social tradeoff between crime rates and incarceration rates.

To be sure, it is possible to imagine overshooting the mark and making the community-corrections system too intrusive; the idea of having public agencies continuously monitoring the whereabouts of millions of individuals has an Orwellian ring. When and if the technical and operational capacities of community-corrections agencies reach that stage, there will be a need for moderation in their use. Only those with records of persistent or outrageous offending should be put on position monitoring for periods of years. Cost pressures and the principles of incentive management will dictate that the reward for sustained compliance should be loosened restrictions and reduced monitoring.

But the problem of overintrusiveness, if it arises, is some-

where off in the future. Today's problem is the failure of parole and probation to substitute for incarceration, giving rise to the unpleasant combination of high crime rates and large prison populations. That is a problem for which the HOPE model may point the way to a solution.

Already, the Hawaii experience is drawing considerable attention from federal agencies, foundations, and other jurisdictions. Such interest reflects the high level of discontent within the field about the performance of the current community-corrections process. The field of offender rehabilitation is in dire need of innovation; widespread change in community supervision practices along these lines would rank among the most significant reforms in corrections policy to date.

But Hawaii had some important advantages when launching its HOPE program: a collegial relationship across state agencies, the absence (despite the state's high overall crime rate) of large crime-blighted or gang-dominated neighborhoods, and the extraordinary public management skill of the innovating judge in securing the cooperation of the many key players whose buy-in was essential to the successful implementation of swift and certain sanctions.

It remains to be seen whether California and other states, with very different institutional arrangements and public-sector cultures, will be able to find the means required to make this collaborative approach work. But if, as U.S. political scientist and policy adviser Richard Neustadt once said, "A crisis is a moment at which it is possible to do something different," then the prison-crowding crisis, and the dramatic failure of parole as currently practiced, may create a moment ready for HOPE.

Mark A.R. Kleiman (kleiman@ucla.edu) is professor of public policy and director of the Drug Policy Analysis Program in the Department of Public Policy, School of Public Affairs, University of California at Los Angeles (UCLA). Angela Hawken (ahawken@ucla.edu) is assistant professor of public policy at Pepperdine University and an economist at the Integrated Substance Abuse Programs of the Semel Institute for Neuroscience and Human Behavior at UCLA.